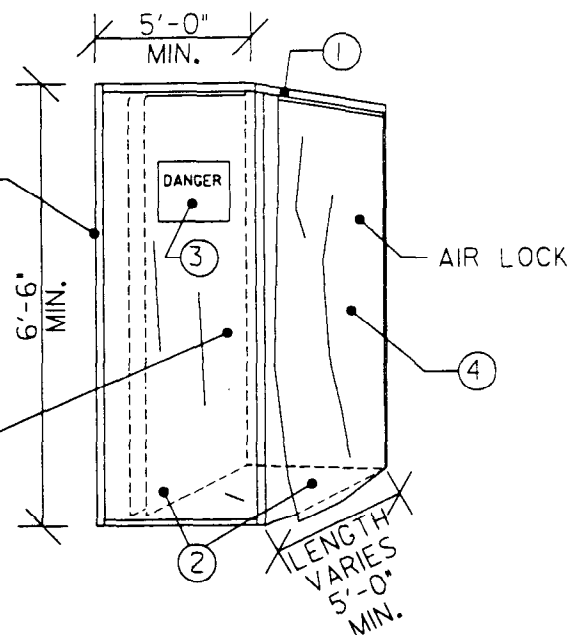


Part 2, Setup Details

FRAME AIR-LOCK WITH VERTICAL STUDS SPACED A MAXIMUM OF 24 IN. ON CENTER EXCEPT AT 3'-0" OPENINGS. PROVIDE HORIZONTAL FRAMING MEMBERS AT TOP AND BOTTOM.

COVER WALLS AND ROOF FRAMING WITH PLYWOOD AND COVER WITH 2 LAYERS OF 6 MIL POLYETHYLENE. TAPE ALL JOINTS.



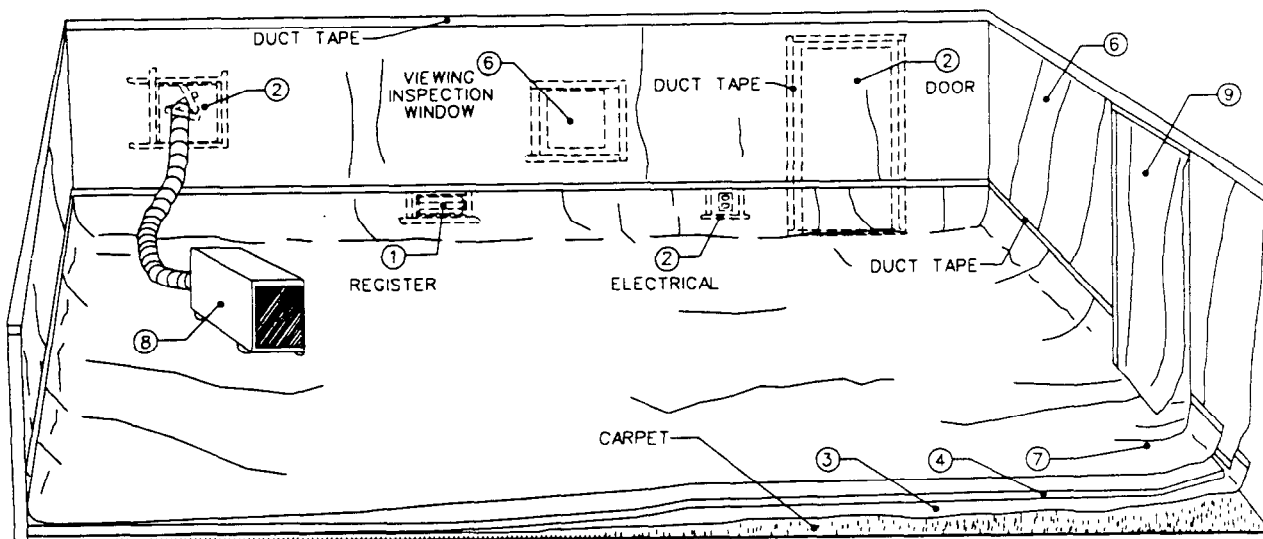
Air lock

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Construct a wood frame. Install one layer of 6-mil polyethylene sheeting to structural members and two layers to the floor. Seal all edges of sheeting to wall, ceiling, and floor surfaces with duct tape.
2. Install triple flaps of 6-mil polyethylene sheeting at both doorways.
3. Install danger signs on each side of air lock area; see sheet 11.
4. Before leaving work area, remove outer suit. Place in a plastic bag; see sheet 9.

5. Enter air lock. Wet wipe respirator and wash hands with clean water from portable sprayer. Remove respirator, and place in a clean plastic bag. Proceed to shower, where inner suit may be removed.

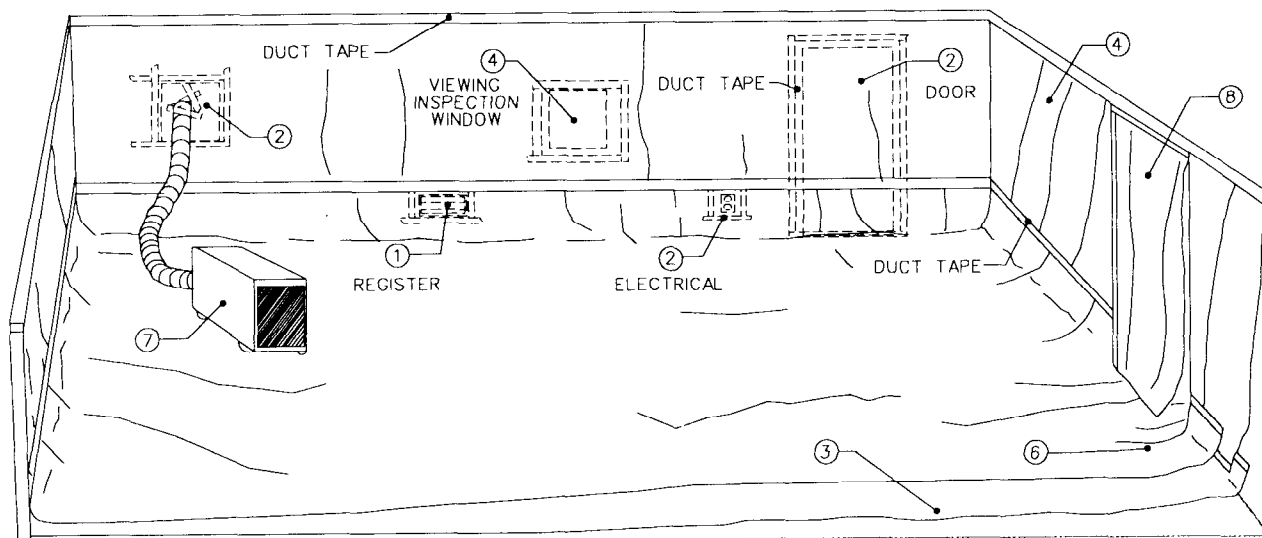
Final clearance requirements. After abatement is completed, prepare area for final clearance.

Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Remove containment area upon instructions from the Contracting Officer, and treat as asbestos-contaminated material; see sheets 9 and 14.



Installation of critical barrier and full containment area (for carpeted floors)

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Eliminate airflow into containment area by isolating all supply and return air ducts from mechanical system. Lock doors and windows not required for access.
 2. Install 6-mil polyethylene critical barriers over all windows, doors, wall openings, electrical outlets, etc. Secure with duct tape on all sides. HEPA vacuum furniture, fixtures, and equipment and remove from or protect in containment area, as specified by the contract.
 3. Install first layer of 6-mil polyethylene on floor, extending the polyethylene 18 inches up wall. Secure with duct tape.
 4. Install 0.5-inch plywood in order to protect 6-mil polyethylene underlay.
 5. Prepare area as follows: turn off electrical power and remove light fixtures. Protect ceiling as required. HEPA vacuum plywood and walls.
 6. Protect wall surface with 6-mil polyethylene from floor to ceiling where walls are not to be abated. Install viewing inspection windows, where feasible.
 7. Place 6-mil polyethylene on top of plywood, extending polyethylene 18 inches up wall.
 8. Install HEPA filter unit and duct work; see sheet 8.
 9. Prepare door into decontamination or load-out unit. See sheet 22 for decontamination unit and sheet 20 for load-out unit. Doors that swing into the work area must be removed from hinges.
- Final clearance requirements.** After abatement has been completed, see sheet 16 for final clearance requirements.



Installation of critical barrier and full containment area (for hard floor surfaces)

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Eliminate airflow into containment area by isolation of all supply and return air ducts from mechanical system. Lock doors and windows not required for access.

2. Install 6-mil polyethylene critical barriers over all windows, doors, wall openings, electrical outlets, etc. Secure with duct tape on all sides. HEPA vacuum furniture, fixtures, and equipment and remove from or protect in containment area, as specified by the contract.

3. Install first layer of 6-mil polyethylene on floor, extending the polyethylene 18 inches up wall. Secure with duct tape.

4. Protect wall surface with 6-mil polyethylene from floor to ceiling. Install view inspection windows, where feasible.

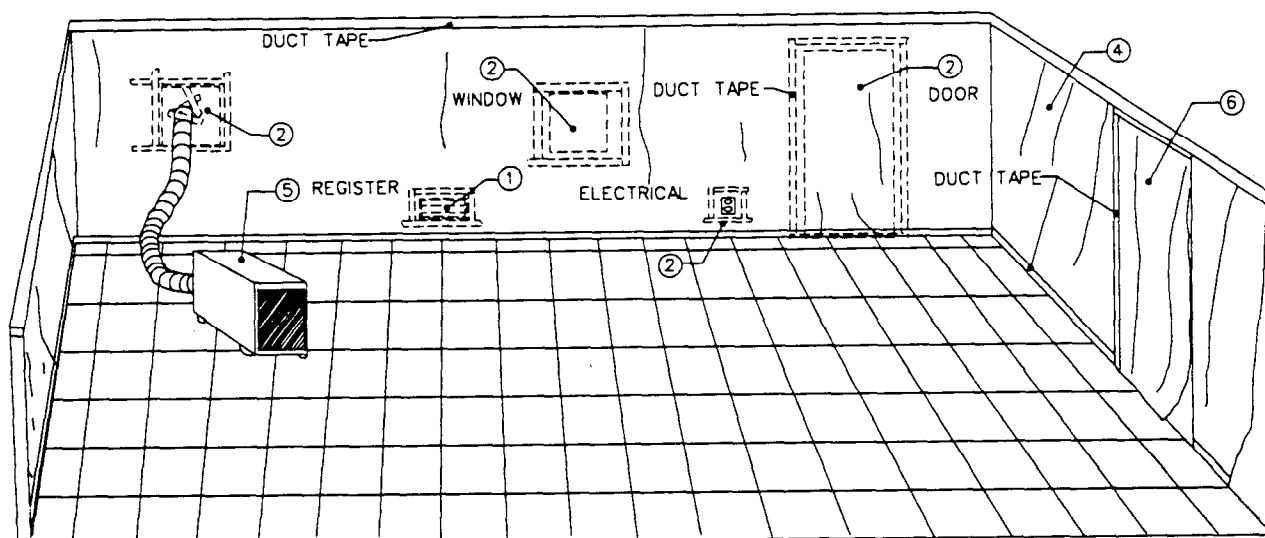
5. Prepare area as follows: turn off electrical power and remove light fixtures. Protect ceiling as required. HEPA vacuum floor and walls.

6. Install top layer of 6-mil polyethylene.

7. Install HEPA filter unit and duct work; see sheet 8.

8. Prepare door into decontamination unit or load-out unit; see sheet 22 for decontamination unit and sheet 20 for load-out unit. Doors that swing into the work area must be removed from hinges.

Final clearance requirements. After abatement has been completed, see sheet 17 for final clearance requirements.



Installation of critical barrier and full containment area (for vinyl tile floors)

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Eliminate airflow into containment area by isolating all supply and return air ducts from mechanical system. Lock doors and windows not required for access.

2. Install 6-mil polyethylene critical barriers over all windows, doors, wall openings, electrical outlets, etc. Secure with duct tape on all sides. HEPA vacuum furniture, fixtures, and equipment and remove from or protect in containment area, as specified by the contract.

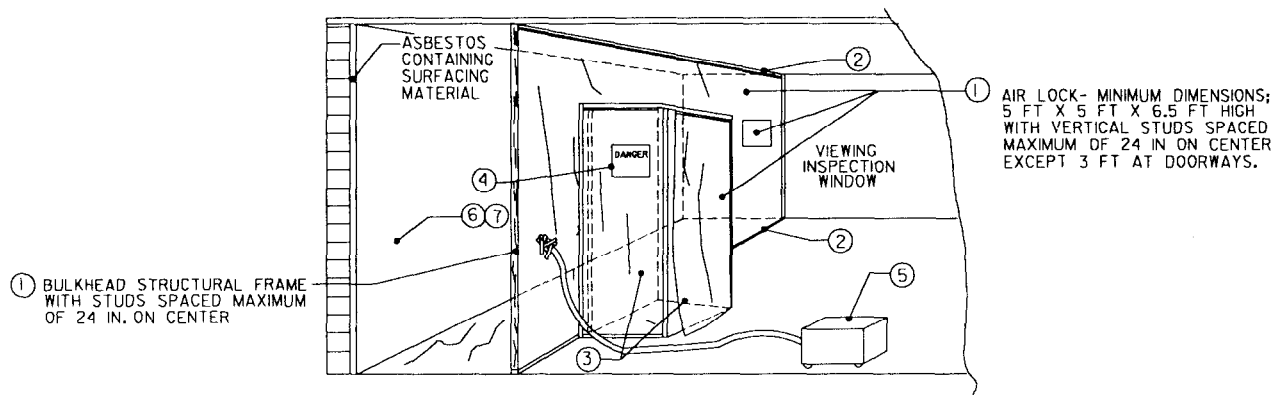
3. Prepare area as follows: turn off electrical power and remove light fixtures. Protect ceiling as required. HEPA vacuum floors and walls.

4. Protect wall surface with 6-mil polyethylene from floor to ceiling. Install viewing inspection windows, where feasible.

5. Install HEPA filter unit and duct work; see sheet 8.

6. Prepare door into decontamination unit or load-out unit; see sheet 22 for decontamination unit and sheet 20 for load-out unit. Doors that swing into the work area must be removed from hinges.

Final clearance requirements. After abatement has been completed, see sheet 18 for final clearance requirements.



Single bulkhead containment area

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Construct a structural frame for a bulkhead wall and an air lock. See sheet 1 for air lock requirements other than those identified in note 1 of this drawing. Bulkhead is to be parallel to the item requiring abatement. Attach structural frame to walls, floor, or ceiling as necessary for stability. Cover the frame with one layer and the floor with two layers of 6-mil polyethylene sheeting, sealing edges of polyethylene to walls, ceilings, and floor surfaces with duct tape. Install viewing inspection windows, where feasible.

2. Seal with duct tape all penetrations (typical) such as pipes, electrical conduit, or ducts.

3. Install triple 6-mil polyethylene flaps at both doorways. Place portable sprayer with clean water, disposable towels, and prelabeled disposal bag in air lock.

4. Install danger signs on outside of containment area; see sheet 11.

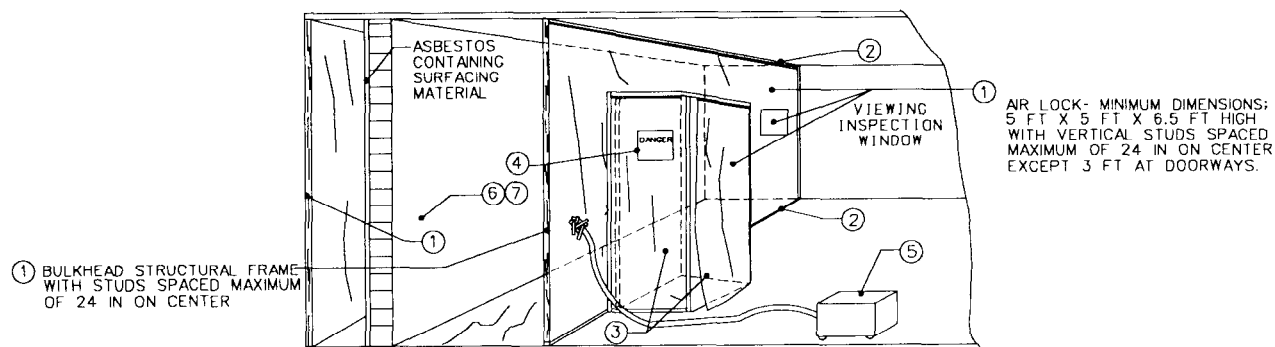
5. Install HEPA vacuum. Extend hose into mini-containment area for general vacuuming, negative air, and cleaning of disposable suit.

6. Accumulate all loose materials for disposal, and place in approved container; see Sheet 9. Apply labels; see sheet 14. Adequately wet clean all wall, floor, tool, and equipment surfaces.

7. Abatement worker must wear two disposable suits. Remove outer suit in work area and place in a plastic bag; see sheet 9. Enter air lock.

8. In air lock, wet wipe respirator and wash hands with clean water from portable sprayer. Remove respirator and place in clean plastic bag. Proceed to remote shower where inner suit may be removed.

Final clearance requirements. After abatement is completed, prepare area for final clearance. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contractor will apply lockdown encapsulant. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Remove containment area upon instructions from the Contracting Officer, and treat it as asbestos- contaminated material. Place in approved container; see sheet 9. Apply labels, see sheet 14. Dispose of as specified in the contract.



Double bulkhead containment area

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Construct a structural frame for two bulkhead walls and an air lock. See sheet 1 for air lock requirements other than those identified in note 1 of this drawing. Bulkheads are to be parallel to the wall being removed. Attach structural frame to walls, floor, or ceiling as necessary for stability. Locate change room on the side opposite the asbestos-containing surface material. Cover the frame with one layer and the floor with two layers of 6-mil polyethylene sheeting and seal edges to walls, ceiling, and floor surfaces with duct tape. If a bulkhead is located outside the building, end walls and a roof will also be required. Install viewing inspection windows, where feasible.

2. Seal with duct tape all penetrations (typical) such as pipes, electrical conduit, or ducts.

3. Install triple 6-mil polyethylene flaps at doorways. Place portable sprayer with clean water, disposable towels, and prelabeled disposal bag in air lock.

4. Install danger signs on outside of containment area; see sheet 11.

5. Install HEPA vacuum; extend hose into mini-containment area for general vacuuming, negative air, and cleaning of disposable suit.

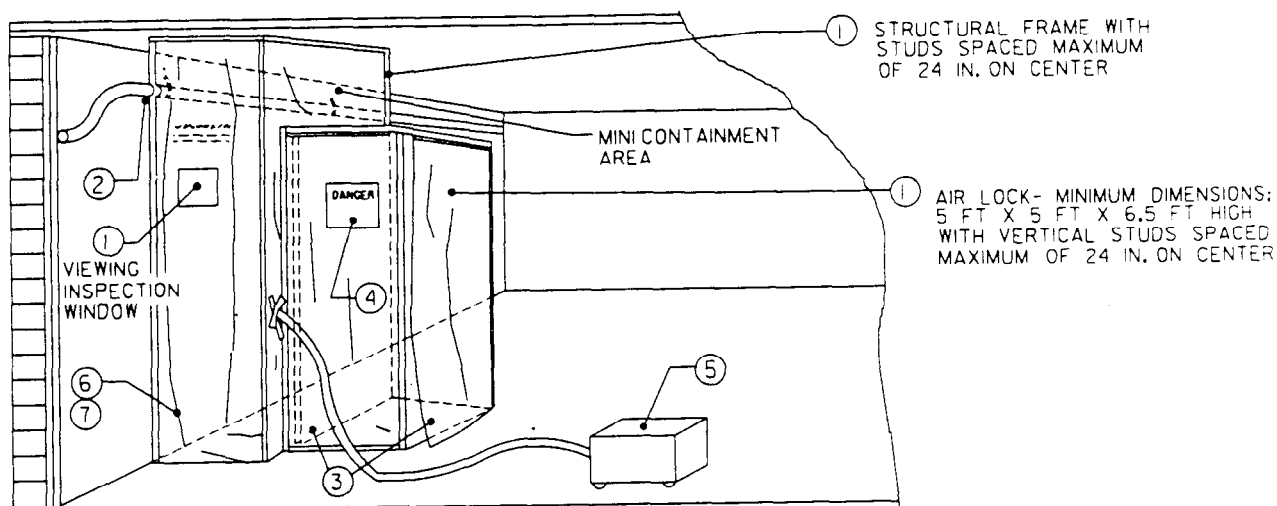
6. Accumulate all loose materials for disposal. Place in approved container; see sheet 9. Apply labels; see sheet 14. Adequately wet clean all wall, floor, tool, and equipment surfaces.

7. Abatement worker must wear two disposable suits. Remove outer suit in work area and place in a plastic bag; see sheet 9. Enter air lock.

8. In air lock, wet wipe respirator and wash hands with clean water from portable sprayer. Remove respirator and place in a clean plastic bag. Proceed to shower where inner suit may be removed.

9. After abatement is completed, prepare area for final clearance.

Final clearance requirements. After abatement is completed, prepare area for final clearance. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contractor will apply lockdown encapsulant. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Remove containment area upon instructions from the Contracting Officer, and treat it as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of as specified in the contract.



Mini-containment area

1. Establish work area so that unauthorized entry is prevented; see sheet 11. Construct a two-compartment wood frame around work area; install one layer 6-mil polyethylene sheeting to structural members and two layers 6-mil polyethylene sheeting to the floor. Seal all edges to wall, ceiling, and floor surfaces with duct tape. Install viewing inspection windows, where feasible.

2. Seal with duct tape all penetrations (typical) such as pipes, electrical conduit, or ducts.

3. Install triple 6-mil polyethylene flaps at both doorways. Place portable sprayer with clean water, disposable towels, and prelabeled disposal bag in air lock.

4. Install danger signs on outside of containment area. See sheet 11.

5. Install HEPA vacuum; extend hose into mini-containment area for general vacuuming, negative air, and cleaning of disposable suit.

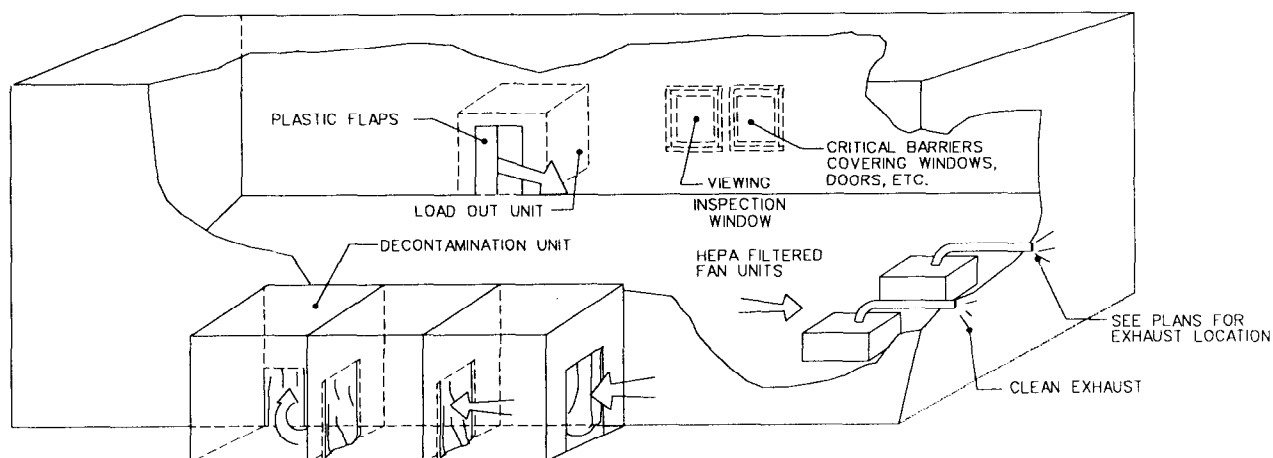
6. Accumulate all loose materials for disposal. Place in approved container; see sheet 9. Apply labels; see

sheet 14. Adequately wet clean all wall, floor, tool, and equipment surfaces.

7. Abatement worker must wear two disposable suits. Remove outer suit in work area and place in a plastic bag; see sheet 9. Enter air lock.

8. In air lock, wet wipe respirator and wash hands with clean water. Remove respirator and place in a clean plastic bag. Proceed to remote shower unit where inner suit may be removed.

Final clearance requirements. After abatement is completed, prepare area for final clearance. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contractor will apply lockdown encapsulant. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Remove containment area upon instructions from the Contracting Officer, and treat it as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels, see sheet 14. Dispose of as specified in the contract.



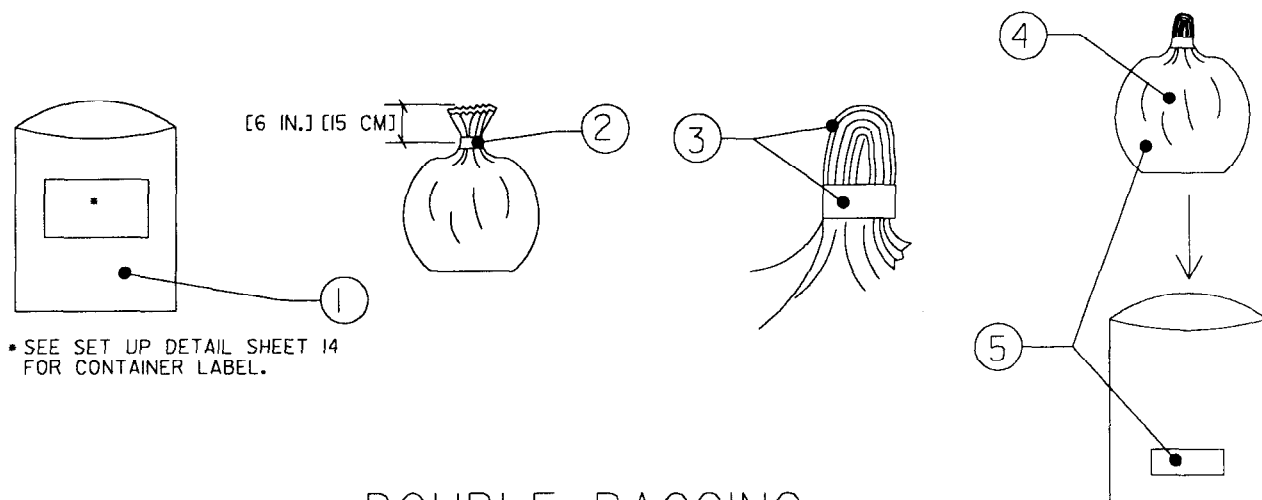
Ventilation of containment area and decontamination unit, using HEPA filters

1. Install a ventilation system in the containment area that draws the air supply through the decontamination and load-out units. See sheets 20 and 22.
2. Operate ventilation system 24 hours a day from start of abatement through final clearance.
3. Place at the decontamination unit entrance a pressure gauge that measures differential pressure between abatement and ambient areas. Gauge must be read hourly and logged or continuously recorded.
4. The ventilation system must create, as a minimum, a negative pressure of 0.02 inches of water inside the containment area (relative to the outside of the containment area) and must be sized for a minimum of four air changes per hour or more, as specified in the contractor's asbestos hazard abatement plan.

5. Locate HEPA filters in order to prevent dead air pockets.

6. Exhaust filtered air to outside of building, unless otherwise approved by the Contracting Officer.

Final clearance requirements. For final clearance, remove ventilation system upon instruction from the Contracting Officer and relocate to equipment room of decontamination unit. Thoroughly HEPA vacuum unit and ducting. Adequately wet clean all surfaces and wheels of unit(s). Collect all waste debris and unit filters, and treat as asbestos-contaminated material, placing in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of waste as required by the contract. Wrap unit in one layer of 6-mil polyethylene sheeting, and seal with duct tape before removing from job location.



DOUBLE BAGGING

Containers—double bagging

1. Place the still-wet asbestos-containing and asbestos-contaminated material into a prelabelled 6-mil polyethylene bag. Do not overfill. Do not use bag for asbestos-containing or asbestos-contaminated material that could puncture the bag. (See sheet 9C for packaging items that could puncture bags.)

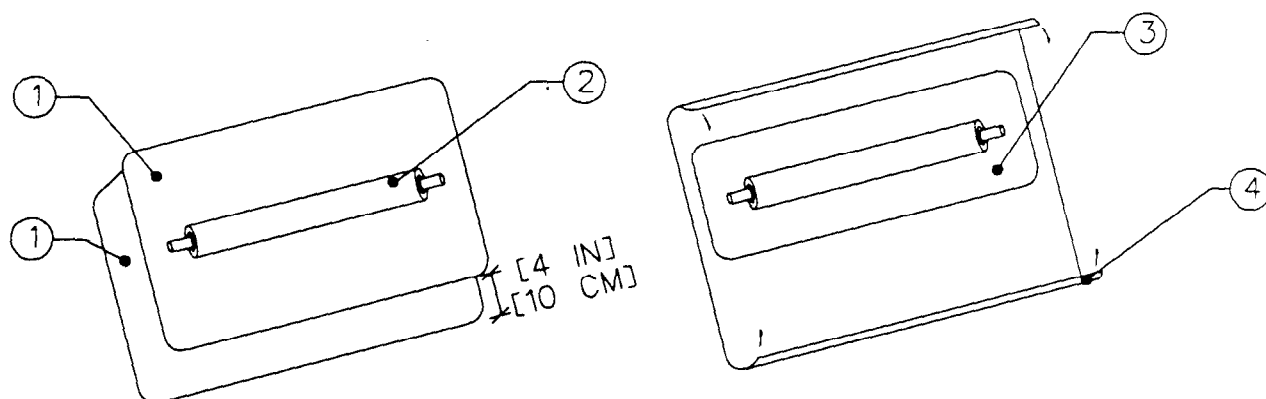
2. Evacuate with HEPA vacuum, and seal collapsed bag by twisting top [6 in] [15 cm] closed and wrapping with a minimum of two layers of duct tape.

3. Twist top and fold over. Apply second wrap of duct tape.

4. Adequately wet clean outside of disposal bag by wet wiping, and take bag to the equipment and staging area.

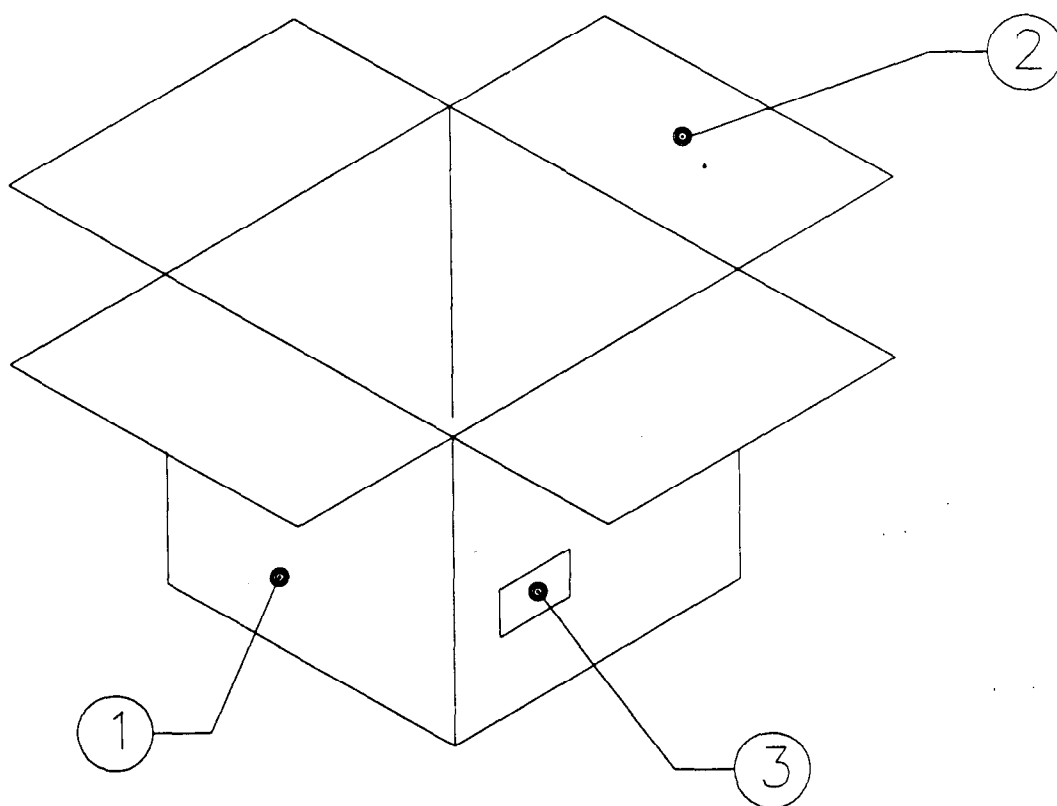
5. Place bag inside a second prelabelled 6-mil polyethylene bag.

6. Seal outer bag by repeating steps 2 and 3 above. Take bag to load-out unit; see sheet 20.



Containers—leak-tight wrapping

1. Place two layers of 6-mil polyethylene sheet on surface so that the bottom layer is offset [4 in] [10 cm] from the top layer.
2. Place the still-wet asbestos-containing or asbestos-contaminated material that is too large (boiler, vessel, pipe segment, etc.) to be placed in disposal bags on the top layer of polyethylene.
3. Wrap the top layer tightly around the contaminated material. Seal all edges of the top layer of sheeting with duct tape. Apply labels; see sheet 14.
4. Repeat procedure with bottom layer, including labeling. Take to load-out unit; see sheet 20.

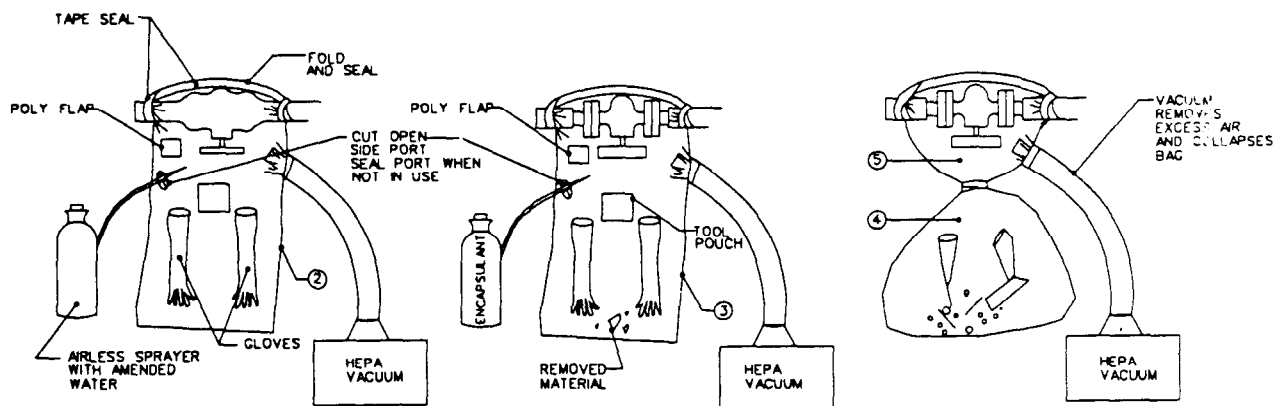


Containers—corrugated cardboard boxes

1. Place still-wet asbestos-containing or asbestos-contaminated material that could puncture disposal bags into heavy-duty corrugated cardboard boxes coated with plastic or wax that will retard deterioration from moisture.

2. Close flaps, and seal with duct tape.

3. Apply labels; see sheet 14. Place box into disposal bags; see sheet 9A. Take to load-out unit; see sheet 20.



Glove bag

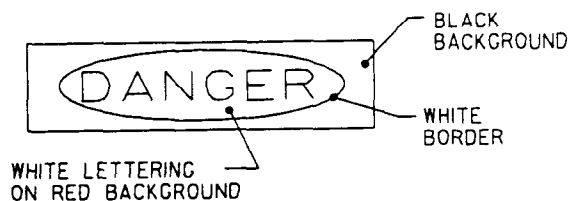
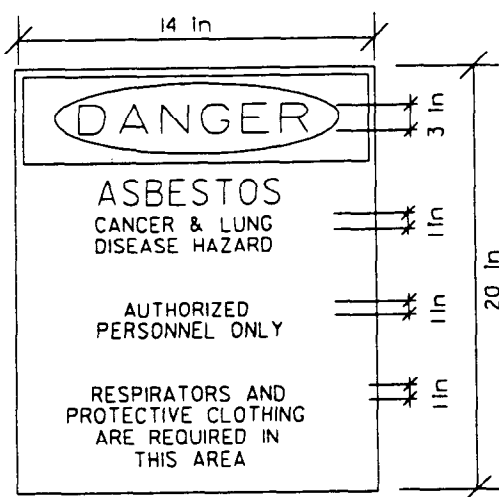
1. Construct modified containment area in accordance with sheet 21. NOTE: Inspect for structural integrity the insulation material adjacent to section being removed, since glove bag removal procedure is not appropriate if it will cause asbestos fiber release from adjacent asbestos-containing material.
2. Put tools and rags inside glove bag. Insulation adjacent to the asbestos-containing material being removed must be adequately wet cleaned and sprayed with an encapsulant before placing glove bag over the area to be removed. Install glove bag according to manufacturer's instructions. (NOTE: Negative-air glove bags may be used if first approved by Contracting Officer. Manufacturer procedures for negative-air glove bags will vary from procedures identified on this sheet.) Install HEPA filter vacuum cleaner with hose ducted into bag. Seal with duct tape. Smoke test for leaks. Soak insulation with amended water.
3. Remove insulation and clean exposed metal surfaces. Encapsulate exposed ends of insulation and metal surfaces. Adequately wet clean glove bag surfaces to below tool pouch.

4. Grasp tools in pouch and withdraw by pulling glove inside out. Twist glove above encased tools to create a constriction, and tape constricted area with duct tape. Cut through middle of taped area so that tools and glove bag will both remain sealed. Place encased tools into tool pouch of next glove bag or decontaminate by water immersion.

5. Evacuate glove bag, using HEPA vacuum. Twist bag to create a constriction below tool pouch. Wrap constricted area with duct tape. Cut bag [4 in] [10 cm] above constriction. Double bag cut off portion of bag; see sheet 9. Apply labels; see sheet 14. Cap and seal end of HEPA vacuum hose in order to prevent incidental fiber release.

6. Remove remaining portion of glove bag. Place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose as asbestos-contaminated waste.

Final clearance requirements. For final clearance, Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contract designee(s) will conduct final air-clearance monitoring as required by the contract.











AREA WARNING SIGNS AND WARNING TAPE

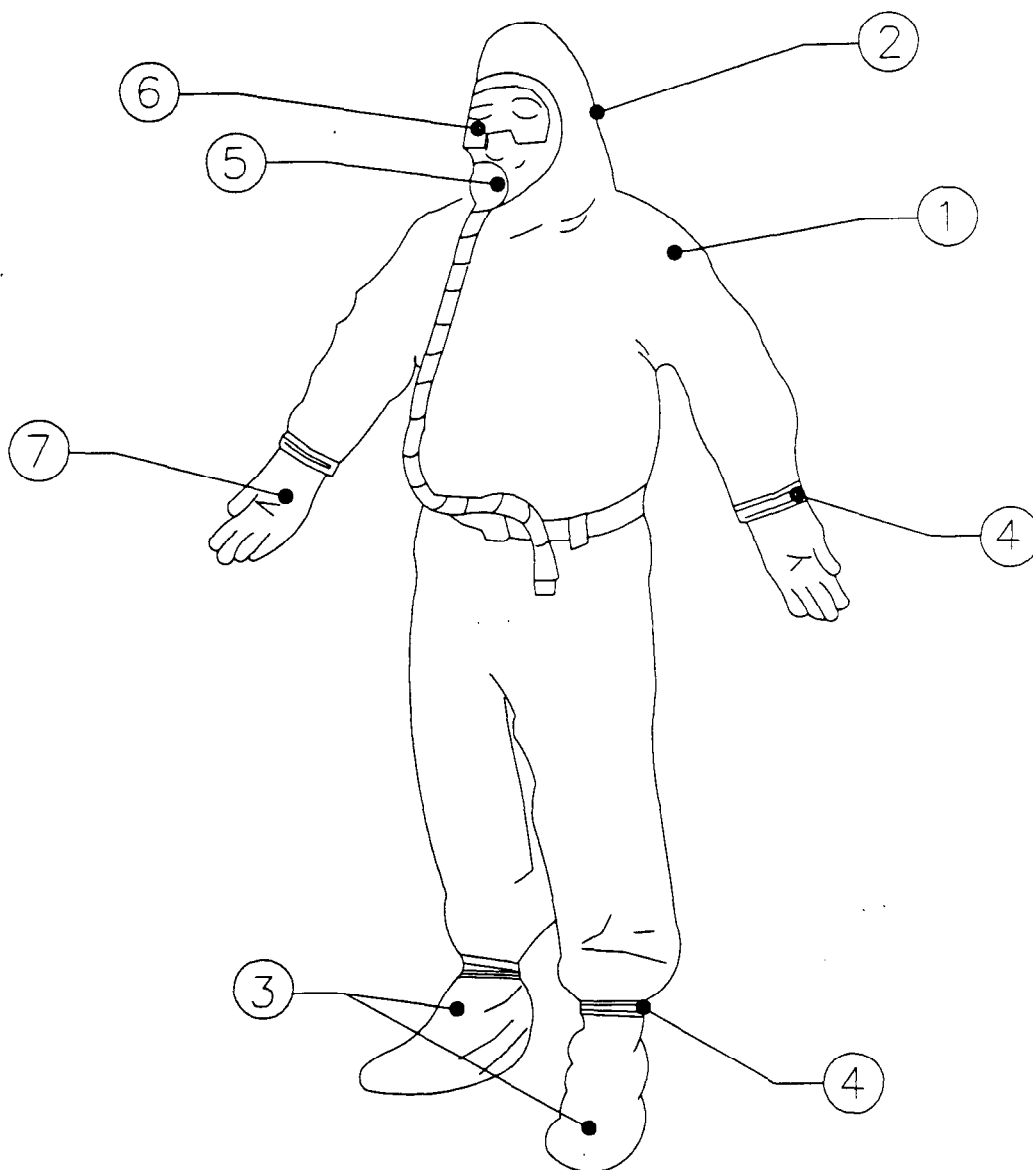
DETAIL

Area warning signs and warning tape

1. Provide and install [4 mil] [0.10 mm] polyethylene warning tape at locations shown on the abatement area plan.
2. Warning tape is to be attached to wood or metal posts at [10 ft] [300 cm] on center. Tape must be [3 ft] [100 cm] from ground.
3. Attach both warning signs at each entrance of the work area and at [33 yd] [30 m] on center where security fencing is installed.
4. Warning signs must be in English and other languages required by the contract.
5. Install at eye level.

FIBER CONCENTRATION	MINIMUM REQUIRED RESPIRATOR	
NOT IN EXCESS OF 1 FIBER/CC	HALF-MASK AIR PURIFYING RESPIRATOR WITH HEPA FILTERS	
NOT IN EXCESS OF 5 FIBERS/CC	FULL FACEPIECE AIR-PURIFYING RESPIRATOR WITH HEPA FILTERS	HEPA FILTER 
NOT IN EXCESS OF 10 FIBERS/CC	LOOSE FITTING HELMET OR HOOD, POWERED AIR-PURIFYING RESPIRATOR WITH HEPA FILTERS	BATTERY-POWERED BLOWER WITH HEPA FILTER 
NOT IN EXCESS OF 10 FIBERS/CC	POWERED AIR-PURIFYING RESPIRATOR WITH FULL FACEPIECE AND HEPA FILTER	
NOT IN EXCESS OF 10 FIBERS/CC	LOOSE FITTING HELMET OR HOOD, SUPPLIED AIR RESPIRATOR OPERATED IN CONTINUOUS FLOW MODE WITH BACK-UP HEPA FILTER	
NOT IN EXCESS OF 10 FIBERS/CC	SUPPLIED AIR RESPIRATOR WITH FULL FACEPIECE OPERATED IN CONTINUOUS FLOW MODE WITH BACK-UP HEPA FILTER	AIR SUPPLY 
NOT IN EXCESS OF 100 FIBERS/CC	FULL FACEPIECE SUPPLIED AIR RESPIRATOR OPERATED IN PRESSURE-DEMAND MODE WITH BACK-UP HEPA FILTER	AIR SUPPLY 
GREATER THAN 100 FIBERS/CC OR UNKNOWN CONCENTRATION	FULL FACEPIECE SUPPLIED-AIR RESPIRATOR OPERATED IN PRESSURE-DEMAND MODE WITH AUXILIARY POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS	AUXILIARY POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS  AIR SUPPLY

Respiratory protection table



Protective clothing

1. Disposable or reusable full body suit with elastic around hood and shoe cover openings is required or as otherwise specified in the contract.

2. Hood shall be worn over respirator's head and neck straps.

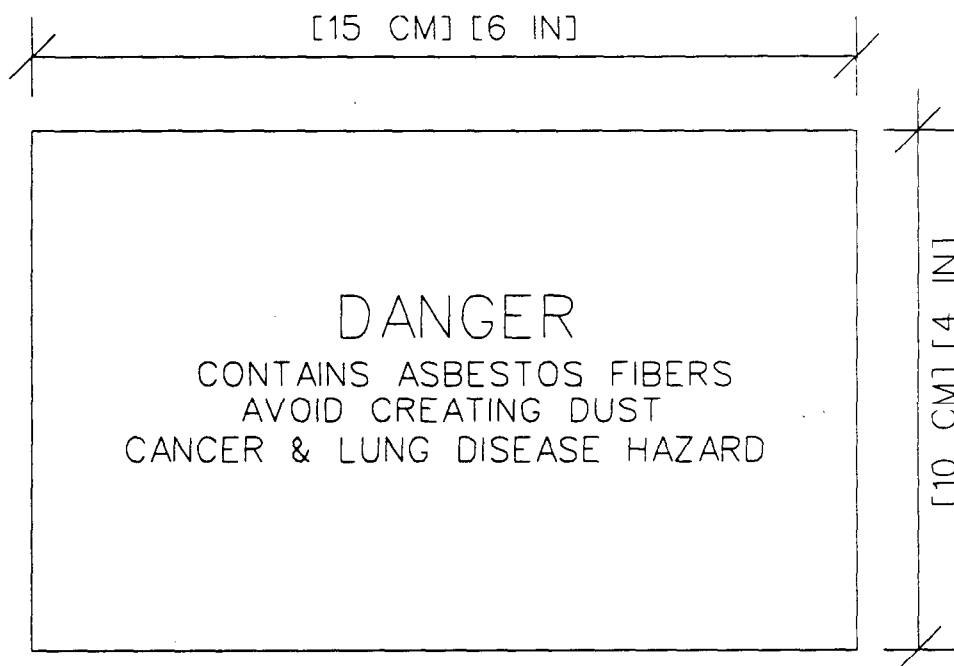
3. Shoe covers shall be worn over work shoes.

4. Cuffs shall be taped with duct tape at wrists and ankles in order to prevent infiltration.

5. Cartridge-type air-purifying HEPA filter respirator is minimal requirement. Type shall be selected in accordance with sheet 12.

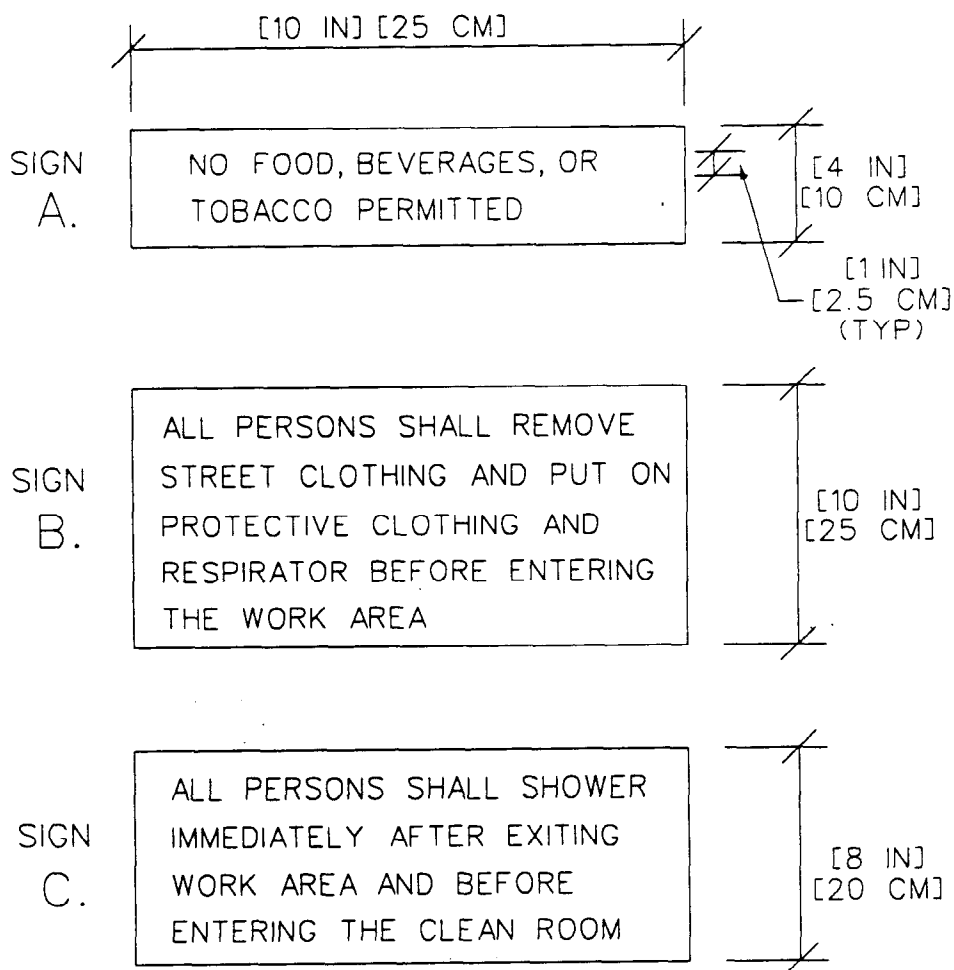
6. If eye protection is not integral with respirator, protection goggles are required.

7. Rubber work gloves are recommended to be worn alone or under outer work gloves provided for hand and operation safety.



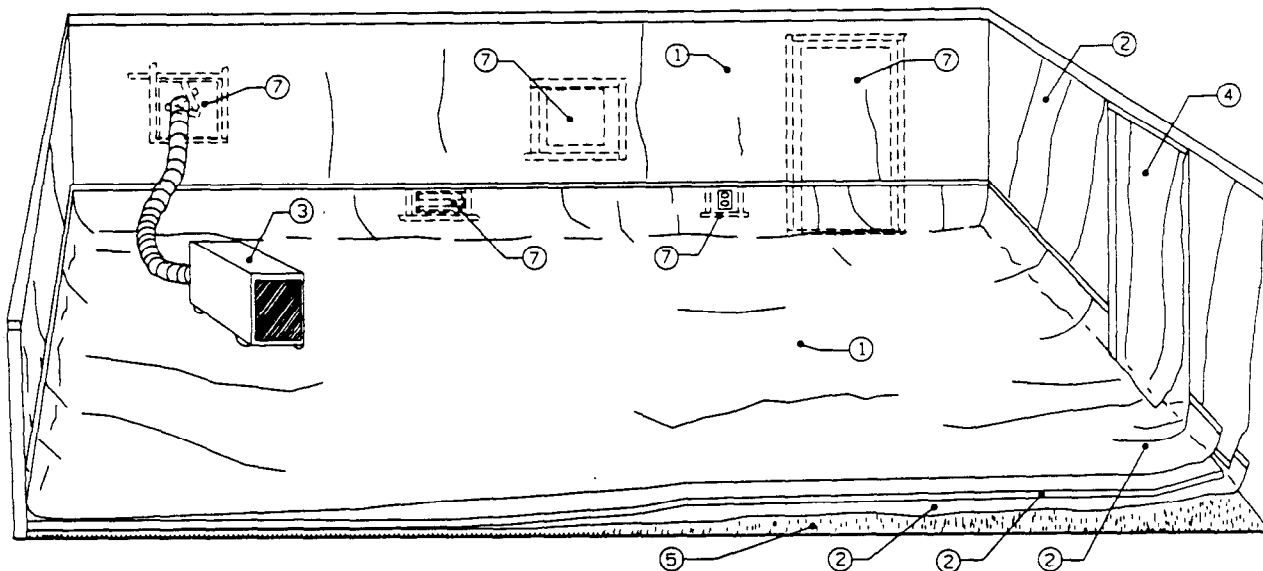
Disposal container label

Attach warning labels to each disposal container removed from abatement area.



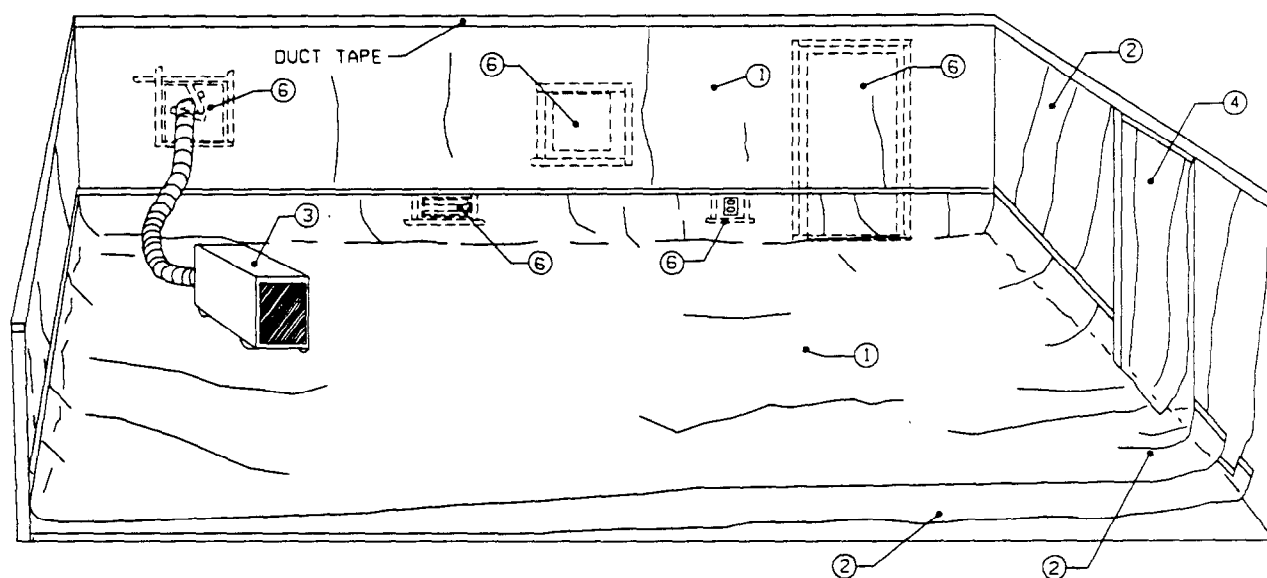
Decontamination unit signage

1. Provide signs in English and other languages required by the contract.
2. Install at eye level.



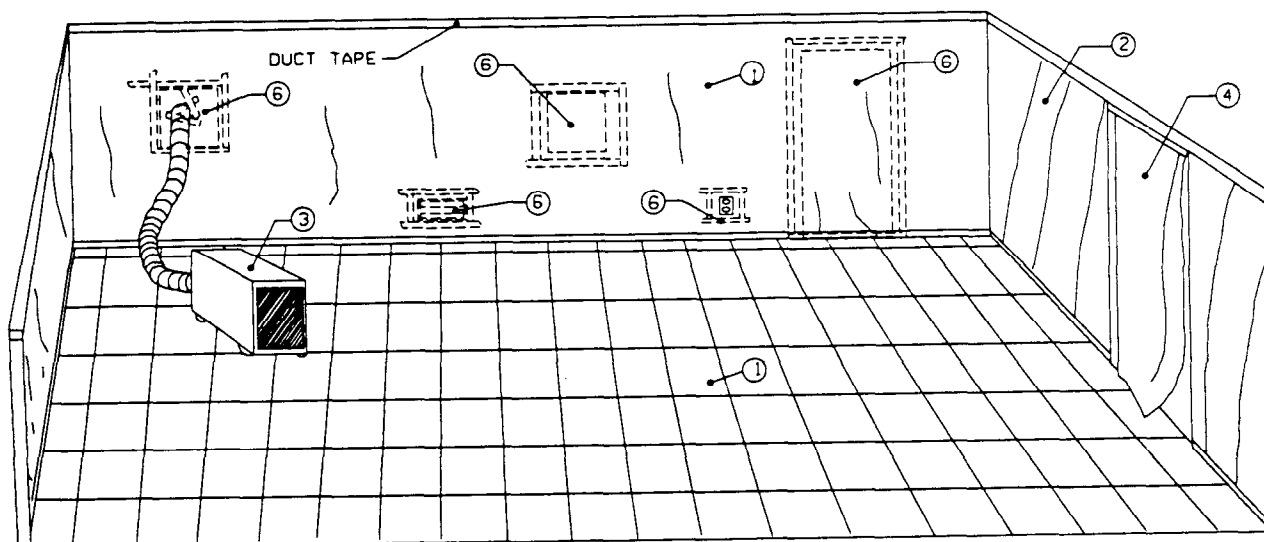
Preparation of full containment area for final clearance (for carpeted floors)

1. Accumulate all loose material for disposal. Place material in approved container; see sheet 9. Apply labels; see sheet 14. Adequately wet clean and HEPA vacuum all wall, floor, and equipment surfaces.
2. Contractor and contracting officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*.
3. Apply lockdown encapsulant.
4. Remove polyethylene from walls, floor, and plywood. HEPA vacuum plywood before removal. Critical barriers sealing all windows, doors, wall openings, electrical outlets, etc., are to remain. Remove any temporary equipment enclosures used; see sheet 24. Treat polyethylene as asbestos-contaminated material. Place in approved container; see sheet 9 for leak-tight wrapping. Apply labels; see sheet 14. NOTE: With approval from the Contracting Officer, uncontaminated plywood can be treated as ordinary construction waste; otherwise, treat as asbestos-contaminated material.
5. HEPA filter unit remains in place and operating.
6. Door into contamination unit or load-out room remains.
7. HEPA vacuum carpet.
8. Prepare area for final clearance.
9. Contractor and Contracting Officer will recertify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*.
10. Contract designee(s) will conduct final air-clearance monitoring as required by the contract.
11. Upon instruction from Contracting Officer, shut down HEPA filter ventilation system, detach duct work, move system to equipment room of decontamination unit, clear and dispose of waste; see sheet 8. Remove critical barrier and place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of waste as asbestos-contaminated material.



Preparation of full containment area for final clearance (for hard-surfaced floors)

1. Accumulate all loose material for disposal. Place in approved container; see sheet 9. Apply labels; see sheet 14. Adequately wet clean and HEPA vacuum all wall, floor, and equipment surfaces.
2. Contractor and contracting officer will certify visual inspection of work area on sheet 19, *Certification of Final Clearing and Visual Inspection*.
3. Apply lockdown encapsulant.
4. Remove polyethylene on walls and floor. Critical barriers sealing all windows, doors, wall openings, electrical outlets, etc., are to remain. Remove any temporary equipment enclosures used; see sheet 24. Treat polyethylene as asbestos-contaminated material. Place in approved container; see sheet 9 for leak-tight wrapping. Apply labels; see sheet 14.
5. HEPA filter unit remains in place and operating.
6. Door into decontamination unit or load-out room remains.
7. Prepare area for final clearance.
8. Contractor and Contracting Officer will recertify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*.
9. Contract designee(s) will conduct final air-clearance monitoring as required by the contract.
10. Upon instruction from Contracting Officer, shut down HEPA filter ventilation system, detach duct work, move system to equipment room of decontamination unit, clear and dispose of waste; see sheet 8. Remove critical barrier and place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of waste as asbestos-contaminated material.



Preparation of containment area for final clearance (for vinyl tile floors)

1. Accumulate all loose material for disposal; see sheet 9. Apply labels; see sheet 14. Adequately wet clean all wall, floor, and equipment surfaces.
2. Contractor and contracting officer will certify visual inspection of work area on sheet 19, *Certification of Final Clearing and Visual Inspection*.
3. Apply lockdown encapsulant.
4. Remove polyethylene from walls. Critical barriers sealing all windows, doors, wall openings, electrical outlets, etc., are to remain. Remove any temporary equipment enclosures used; see sheet 24. Treat polyethylene as asbestos-contaminated material. Place in approved container; see sheet 9 for leak-tight wrapping. Apply labels; see sheet 14.
5. HEPA filter unit remains in place and operating.
6. Door into decontamination unit or load-out room remains.
7. Prepare area for final clearance.
8. Contractor and Contracting Officer will recertify visual inspection of work area on sheet 19, *Certification of Final Clearing and Visual Inspection*.
9. Contract designee(s) will conduct final air-clearance monitoring as required by the contract.
10. Upon instruction from Contracting Officer, shut down HEPA filter ventilation system, detach duct work, move system to equipment room of decontamination unit, clear and dispose of waste; see sheet 8. Remove critical barrier and place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of waste as asbestos-contaminated material.

Certification of Final Cleaning And Visual Inspection

Individual abatement task as identified in paragraph, Description of Work _____

In accordance with the cleaning and decontamination procedures specified in the Contractor's asbestos hazard abatement plan and this contract, the Contractor hereby certifies that he/she has thoroughly visually inspected the decontaminated regulated work area (all surfaces, including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) in accordance with ASTM E1368, *Standard Practice for Visual Inspection of Asbestos Abatement Projects*, and has found no dust, debris, or asbestos-containing material residue.

BY: (Contractor's signature) _____ Date _____

Print name and title _____

(Contractor's Onsite Supervisor signature) _____ Date _____

Print name and title _____

(Contractor's Industrial Hygienist signature) _____ Date _____

Print name and title _____

Contracting Officer Acceptance or Rejection

The Contracting Officer hereby determines that the Contractor has performed final cleaning and visual inspection of the decontaminated regulated work area (all surfaces including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) and by quality assurance inspection, finds the Contractor's final cleaning to be:

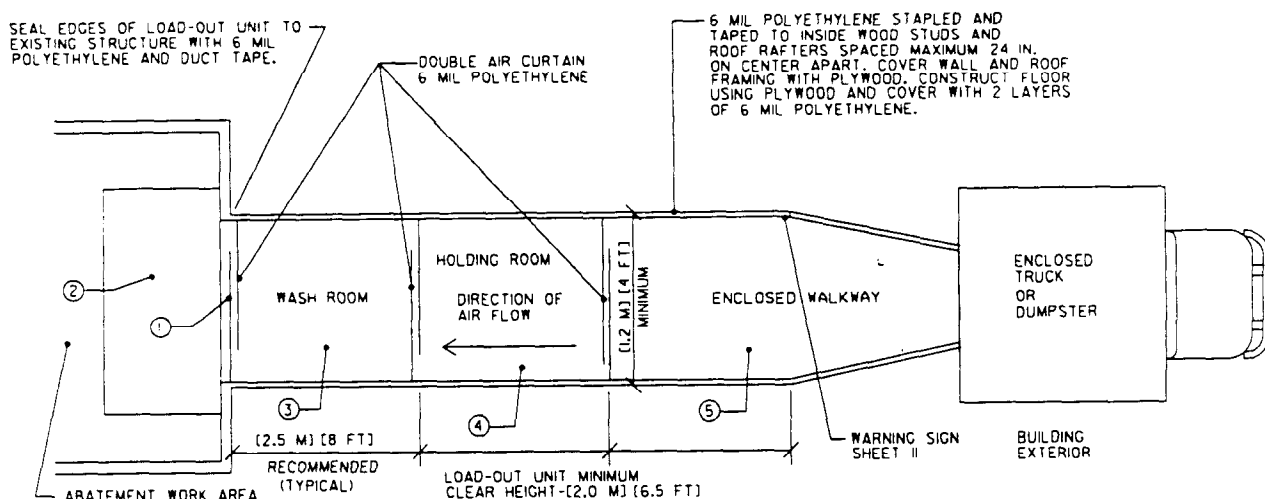
☐ Acceptable

☐ Unacceptable, Contractor instructed to reclean the regulated work area.

BY: Contracting Officer's Representative

Signature _____ Date _____

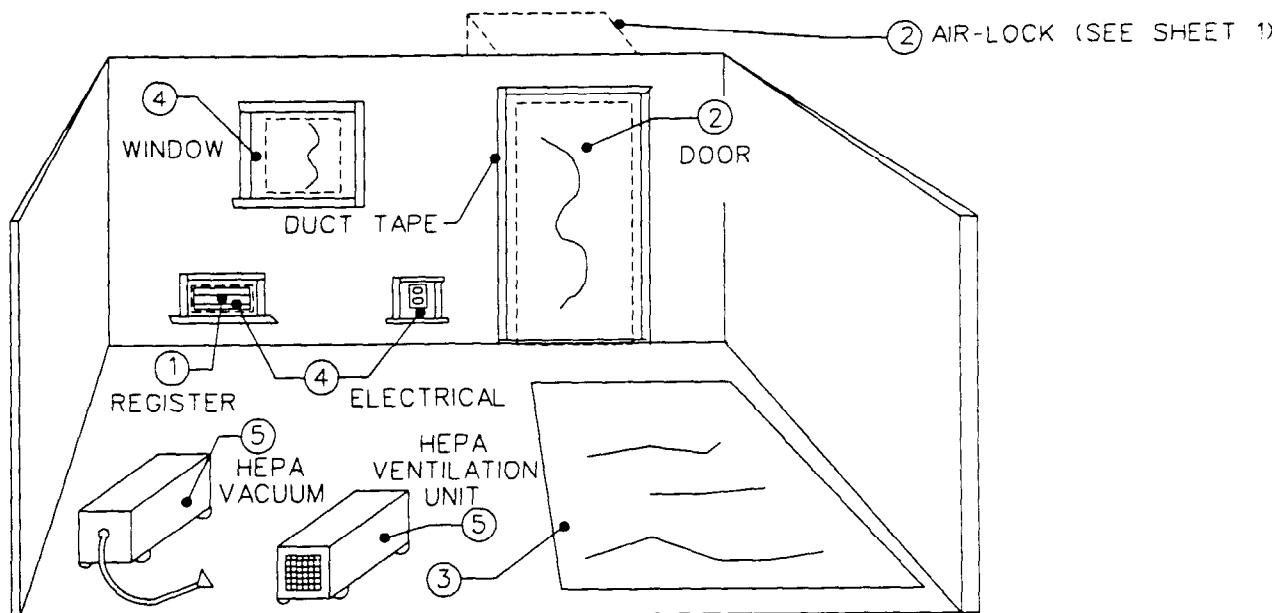
Print name and title _____



Load-out unit floor plan

1. Abatement worker is to enter and exit abatement work area only through decontamination unit.
2. Place additional 6-mil polyethylene sheeting on top of abatement area floor. Double bag asbestos-contaminated material in this area before removing.
3. Wet wipe bags, equipment, and containers, and take to holding room.
4. Stage clean bags, equipment, and containers in holding room until disposal worker removes them.
5. Disposal workers, wearing full protective clothing and appropriate respirator protection, carry decontaminated bags and containers through enclosed walkway and into enclosed truck or Dumpster.

Final clearance requirements. Before breaking down load-out unit, adequately wet clean and HEPA vacuum all surfaces and prepare area for final clearance. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contractor will apply lockdown encapsulant. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Breakdown load-out area upon instructions from Contracting Officer. Treat as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of as required by the contract.



Modified containment area

1. Establish work area and prevent unauthorized entry; see sheet 11. Eliminate airflow into containment area by isolating all supply and return air ducts from mechanical system.

2. Install air lock at entrance to abatement area; see sheet 1. Air lock may be constructed either outside or inside of room. NOTE: Air lock is not required for glove bag operations.

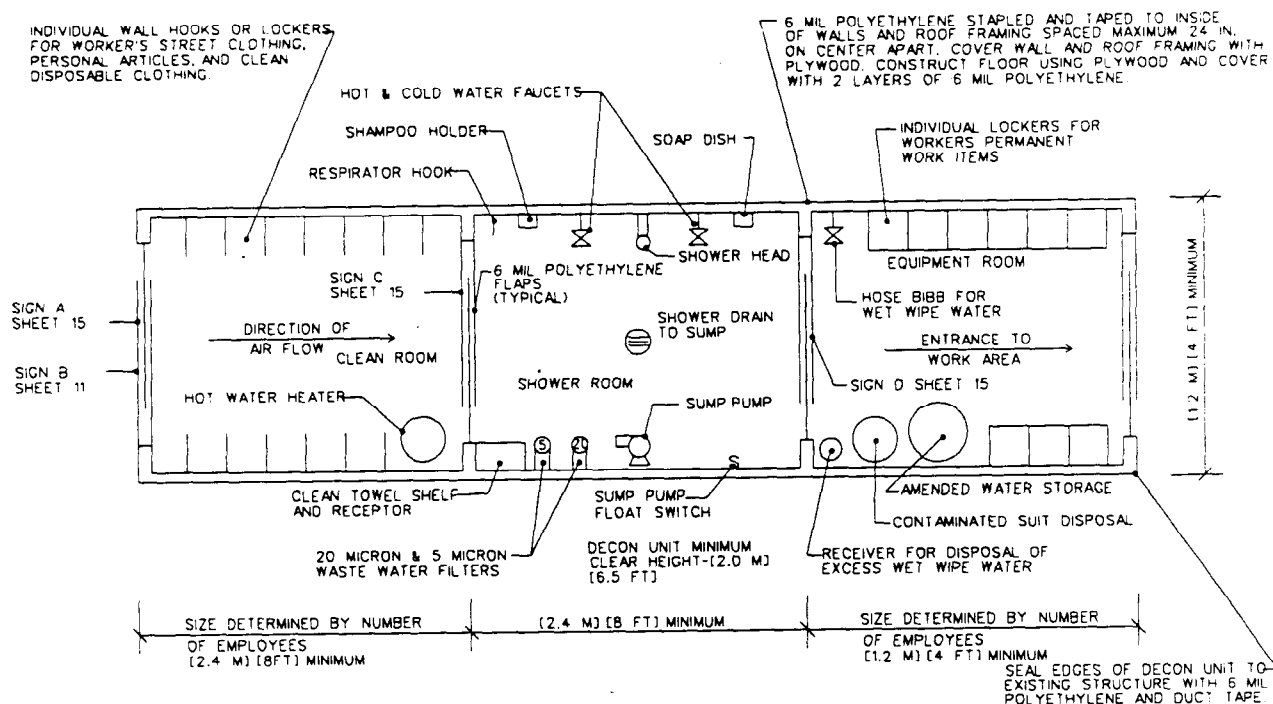
3. Install 6-mil polyethylene sheet on floor under work area.

4. Install 6-mil polyethylene (critical barrier) over all windows, doors, wall openings, electrical outlets, etc. Provide airtight seal, using duct tape.

5. Provide a HEPA-filter vacuum cleaner and a HEPA-filter ventilation system in the work area; see sheet 8. The ventilation system does not have to be ducted to the outside of the structure. The ventilation system shall operate 24 hours a day from start of abatement through final air-clearance monitoring. The ventilation system shall be sized to recirculate the air a minimum of four air changes per hour. For glove bag operations, provide a single HEPA ventilation unit with a measured capture velocity at least 1,500 cfm.

6. Accumulate all loose material and polyethylene from floor. Place in approved container; see sheet 9. Apply labels; see sheet 14. HEPA vacuum and adequately wet clean all wall, floor, and equipment surfaces.

Final clearance requirements. Abatement worker must wear two disposable suits. Remove outer suit in the work area. Place suit in 6-mil disposal bag; see sheet 9. Enter air lock. In air lock, wet wipe respirator and wash hands with clean water from portable sprayer. Remove respirator and place in clean plastic bag. Proceed to remote shower where inner suit may be removed. Prepare work area and air lock for final clearance. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. Upon instructions from the Contracting Officer, remove critical barriers and HEPA ventilation units; see sheet 8. Treat polyethylene as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of as required by the contract.



Decontamination unit floor plan

1. Establish work area so that unauthorized entry is prevented; see sheets 11 and 15. Before entering the work area, all personnel shall remove their street clothing in the clean room and put on protective clothing and respirator.

2. Whenever exiting the work area, all personnel shall:

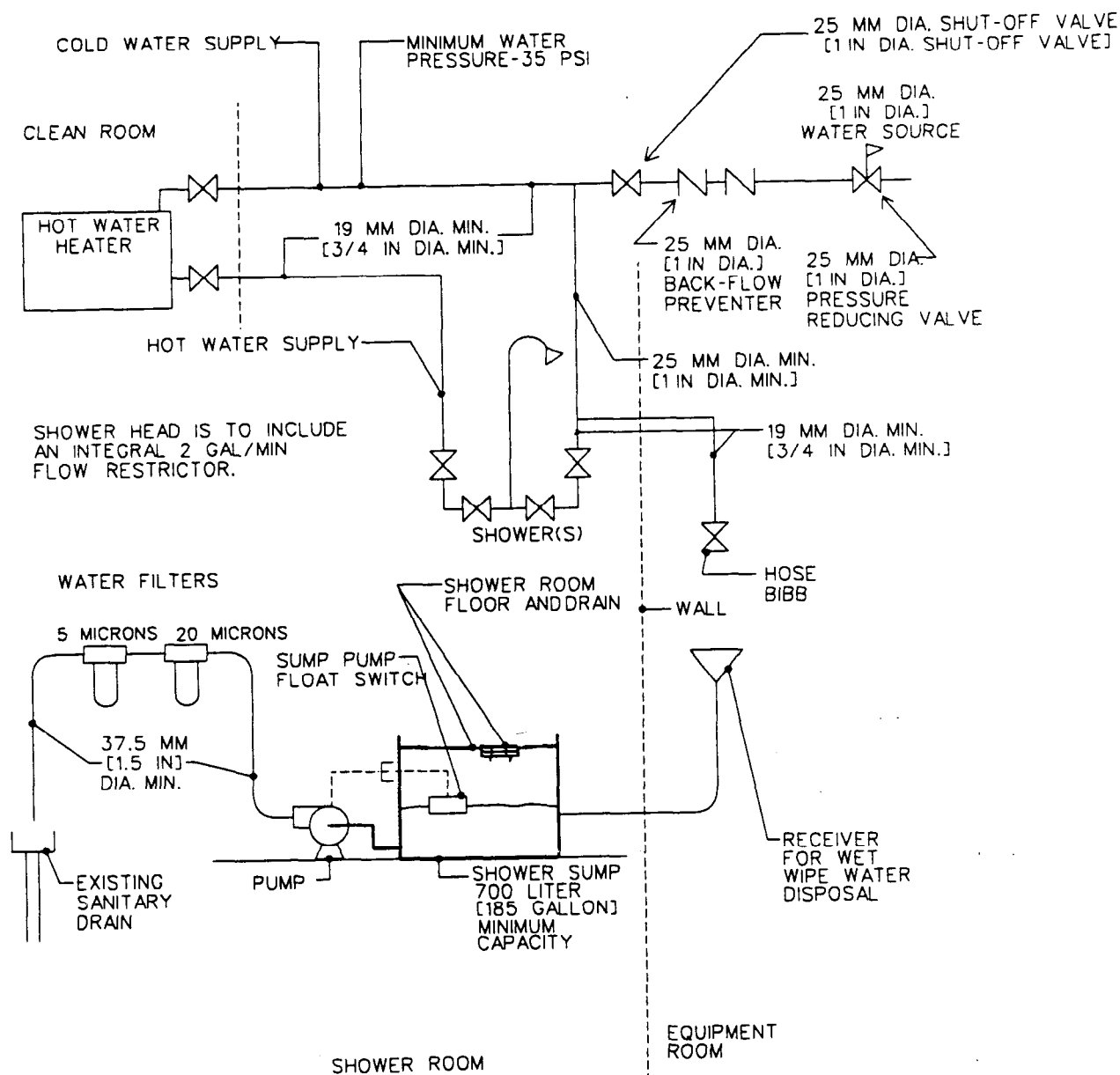
- Vacuum clothing and shoes outside equipment room.
- Remove all clothing and equipment (except respirator) in equipment room.
- Store work shoes and equipment in locker.
- With respirator still on, shower thoroughly, including hair. Then remove respirator and finish shower.
- Proceed to clean room and put on street clothes.

3. See sheet 23 for minimum plumbing requirements, including wastewater filtration. Ensure that plumbing and specified filter size meet local requirements.

4. Twice daily, or more often if necessary, and before breaking down decontamination unit after abatement, adequately wet clean and HEPA vacuum all wall, floor, equipment, and other surfaces. Waste collected in shower room and equipment room shall be treated as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels; see sheet 14.

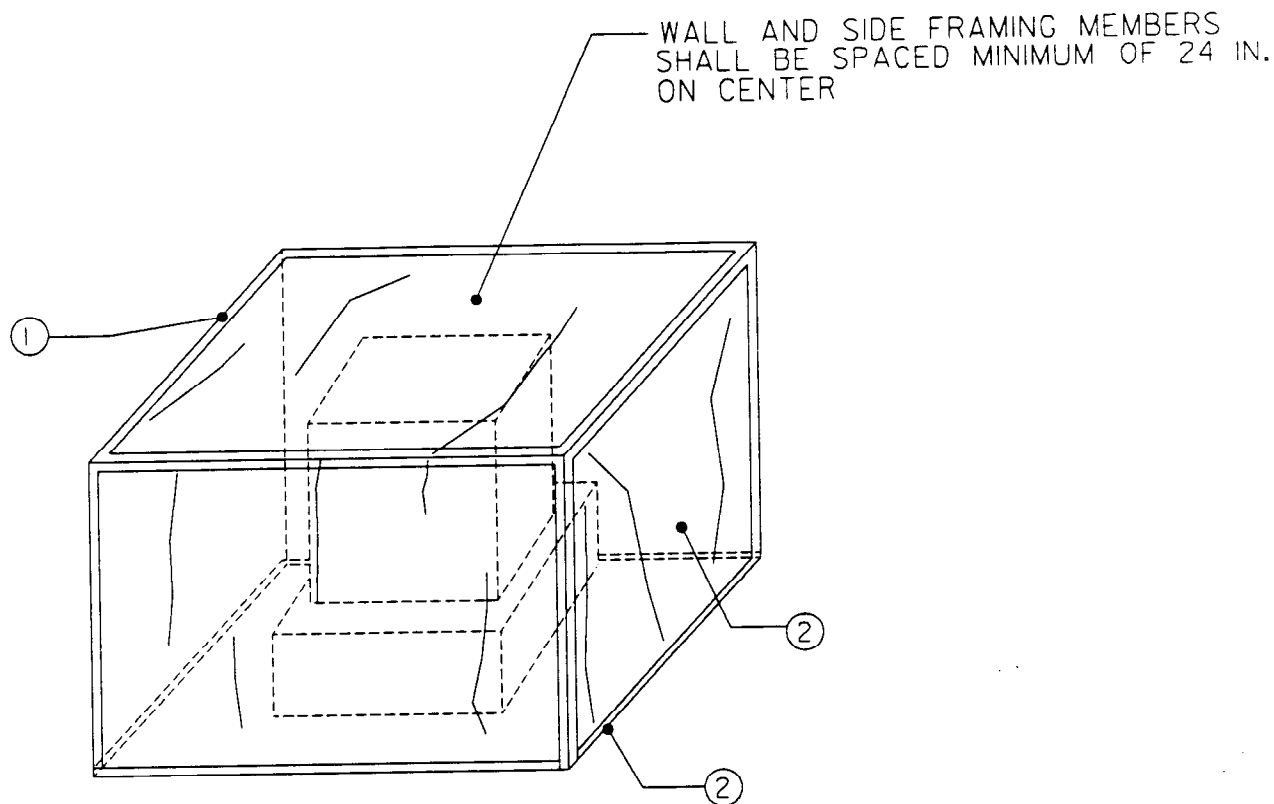
5. Prepare for final clearance.

Final clearance requirements. Contractor and Contracting Officer will certify visual inspection of work area on sheet 19, *Certification of Final Cleaning and Visual Inspection*. Contract designee(s) will conduct final air-clearance monitoring as required by the contract. If the unit is not a prefabricated decontamination unit, apply lockdown encapsulant before final air-clearance monitoring. After approval of final air clearance, break down and treat polyethylene as asbestos-contaminated material. Place in approved container; see sheet 9. Apply labels; see sheet 14. Dispose of as required by the contract.



SIZE CAPACITY OF SUMP PUMP FOR TWICE
THE EXPECTED WASTE WATER FLOW.

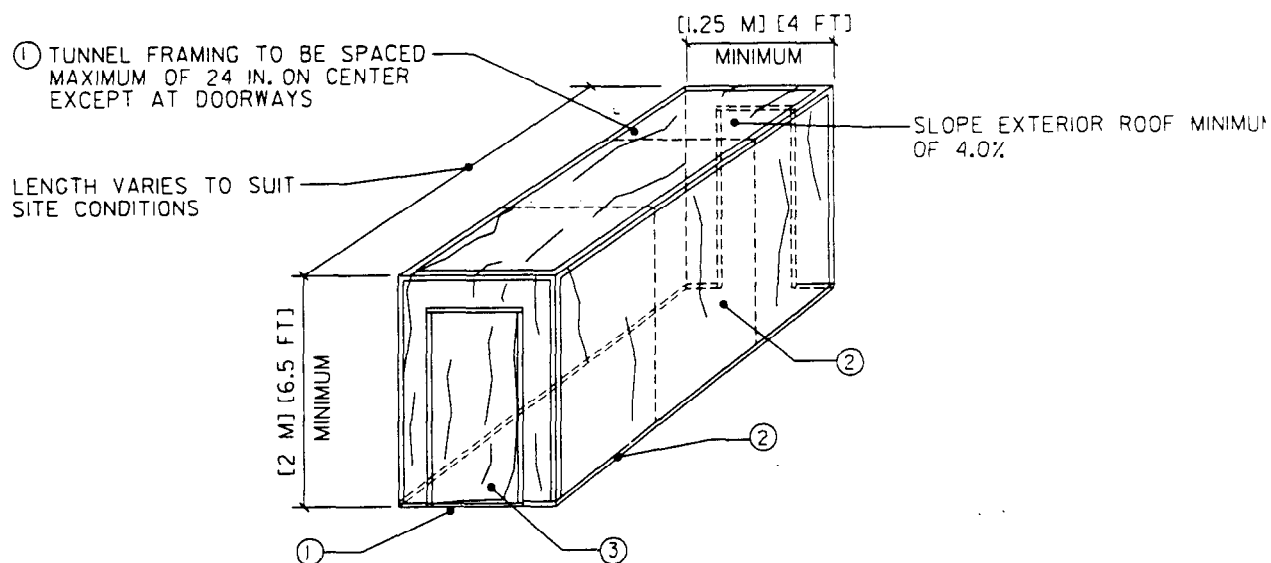
Decontamination unit piping details



Temporary equipment enclosure

1. Construct wood frame of equipment enclosure; then cover all sides and the roof of frame with plywood.
2. Cover entire plywood equipment enclosure with 6-mil polyethylene. Seal seams and edges with duct tape, making the enclosure airtight and watertight.

Final clearance requirements. Upon completion of abatement work, remove temporary enclosure in accordance with the procedures listed on sheet 16, 17, or 18, and prepare for final clearance.



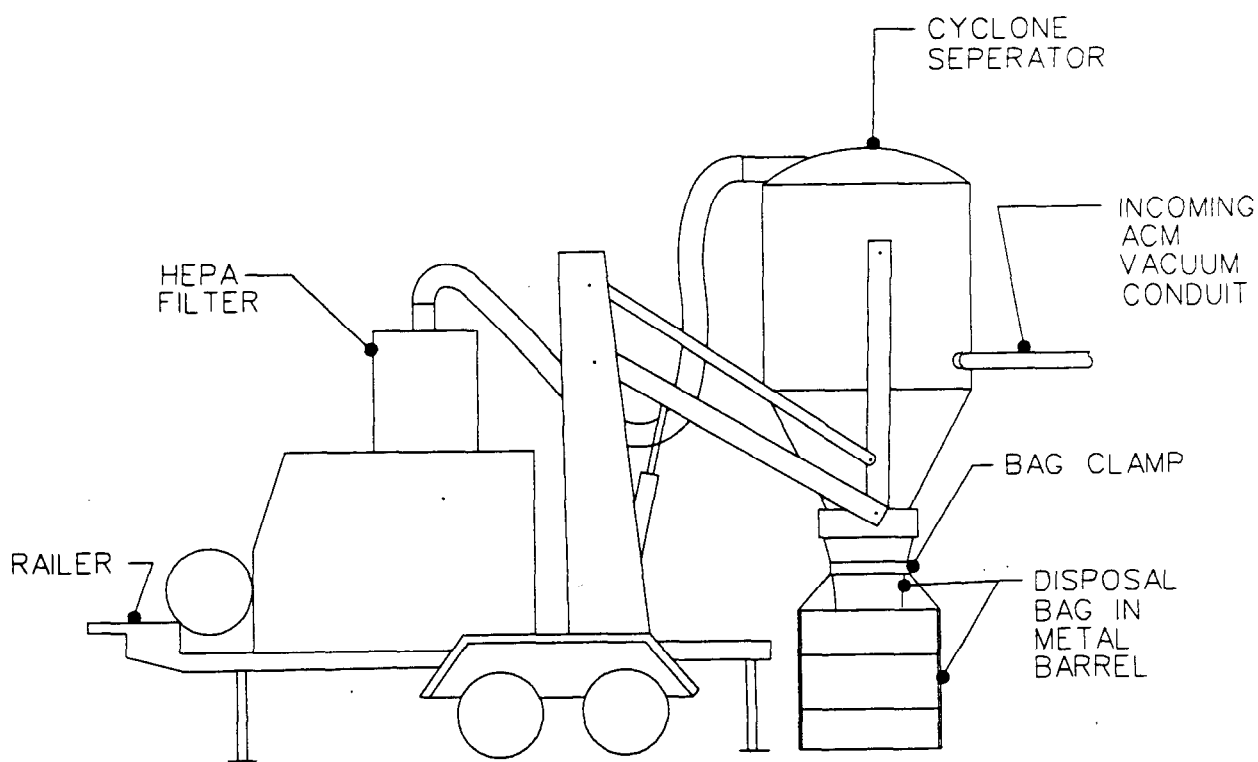
Access tunnel

1. Construct a wood frame tunnel; cover all sides and the roof of the frame with polyethylene. **NOTE:** Cover all sides and roof with plywood or reinforced polyethylene if access tunnel is located outside.

2. Cover entire tunnel with 6-mil polyethylene; seal seams and edges with duct tape, making the tunnel airtight and watertight.

3. Twice daily, or more frequently if necessary, adequately wet clean and HEPA vacuum all wall, floor, and equipment surfaces.

Final Clearance Requirements. Upon completion of abatement work, remove access tunnel in accordance with the procedures listed on sheet 16, 17, or 18, and prepare for final clearance.



Asbestos power vacuum collection and removal system

An asbestos power vacuum collection and removal system is a completely self-contained, material-handling system used to transport large volumes of asbestos-containing material through a large-diameter vacuum conduit to a trailer or truck-mounted collector. The cyclone is designed to separate the wet asbestos-contaminated material

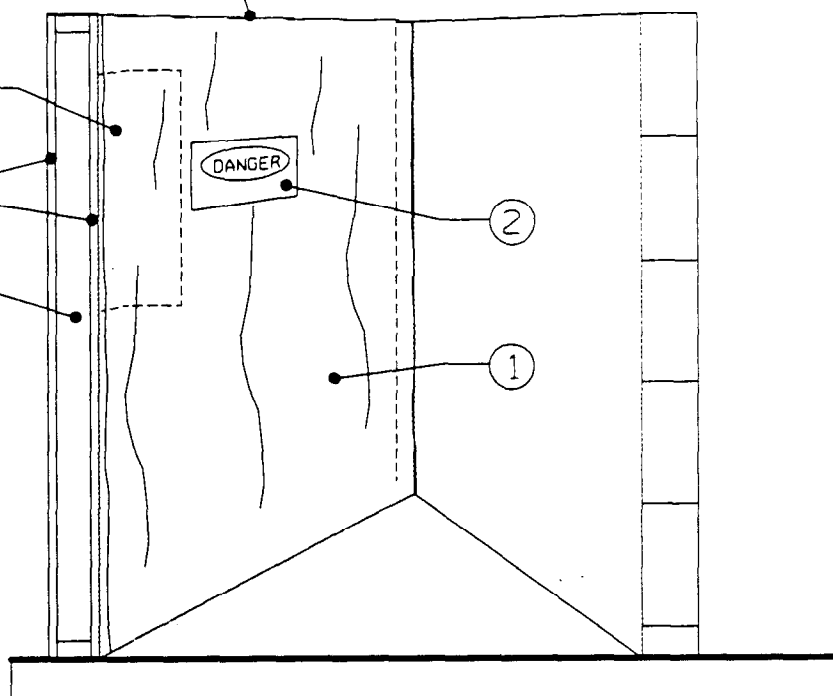
from the air stream and enable easy transfer to disposal containers. Asbestos-contaminated air is HEPA filtered before being discharged into the atmosphere. The contractor shall follow manufacturer-recommended operating and maintenance procedures in order to protect workers and environment.

WOOD STUDS SPACED
MAXIMUM 24 IN. ON CENTER

POLYETHYLENE

DRYWALL

STRUCTURAL
FRAME



Structural critical barrier

1. The purpose of this critical barrier is to isolate the containment area from the remainder of the building. The barrier shall consist of fire-rated drywall mounted on both sides of a structural frame, with the face of the containment area covered by a 6-mil polyethylene sheet. Seal the edges of the polyethylene sheet to walls, ceiling, and floor with duct tape. Secure structural frame to adjacent walls as necessary for stability.

2. Install danger signs on side away from containment area. See sheet 11.

3. After final air-clearance monitoring and upon instructions from contracting officer, remove critical barrier and treat polyethylene sheet as asbestos-contaminated material; see sheets 9 and 14. If framing and drywall are asbestos-contaminated, treat as asbestos-contaminated material; see sheets 9 and 14.